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B.Hilliard

PATENT
Attorney Docket No. P1397US00 (98-0865) 1 of 3

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of: Kim C. Smith

Serial No.: 09/421,580

Filed: October 20, 1999

For: *SIMULATED THREE-DIMENSIONAL NAVIGATIONAL MENU SYSTEM*

Art Unit: 2174 ~~2173~~

Examiner: Mylinh T. Tran

Assistant Commissioner for Patents
Washington, D.C. 20231

APPELLANT'S BRIEF ON APPEAL

This is an appeal from the Final Office Action dated July 08, 2002, finally rejecting claims 1-52.

(1) REAL PARTY IN INTEREST

The real party in interest is Gateway, Inc.

(2) RELATED APPEALS AND INTERFERENCES

Appellant is not aware of any related appeals or interferences.

(3) STATUS OF CLAIMS

The status of the claims is as follows:

Claims allowed: none

Claims objected to: none

Claims rejected: Claims 1-52.

(4) STATUS OF AMENDMENTS AFTER FINAL

There have been no amendments proffered after the Final Office Action.

(5)   SUMMARY OF INVENTION

Applicant's invention provides a more informative and useful method of identifying selectable options in a user interface.   A user interface, system, method and software for displaying a simulated three-dimensional display of menu options to a user, thereby maximizing use of a display's real estate by presenting all available options 315 at once while at the same time presenting certain options in a more pronounced manner (e.g., FIGS. 9A and 9B). The system monitors for running applications, polls the running applications for any available options, and displays the options in the simulated three-dimensional format. (page 42, lines 7-11, of the specification)

The present invention provides a three-dimensional menu system that continuously presents all available options to a user. The options, or hotspots, in the menu are continuously selectable (e.g., page 19, lines 4-10). The items are easily accessed and discerned when in the foreground of the three-dimensional display and more difficult to discern and pinpoint in the background of the three-dimensional display. All available options 315 are displayed to a user without requiring any user interaction. In addition, the amount of time a user must wait to select an option is reduced. Minimizing wait time is facilitated by configuring all of the displayed targets to be selectable at all times, i.e., whether in the foreground or in the background. (page 27, lines 12-20)

(6)   ISSUES

I.   Whether the Patent Office properly rejected Claims 1-52 under 35 U.S.C. 103(a) as being unpatentable over Matthews, III, et al., U.S. Patent No. 5,724,492, in view of Yeh et al., U.S. Patent No. 6,329,978?

(7)   GROUPING OF CLAIMS

For each ground of rejection that appellant contests herein which applies to more than one claim, such additional claims, to the extent separately identified and argued below, do not stand and fall together.

The Claims are at least as distinguishable as grouped below:

Group I: Claims 1-3, 6, 7, 10-16, 19, 20, 23-29, 32, 33, 36-42, 45, 46, and 49-52.

Group II: Claims 4, 17, 30, and 43.

Group III: Claims 5, 18, 31, and 44.

Group IV: Claims 8, 9, 21, 22, 34, 35, 47, and 48.

(8)   ARGUMENT

The present invention maximizes use of a display's real estate by presenting all available options at once while at the same time presenting certain options in a more pronounced manner. All claims recite two targets 315. The two targets are capable of simulated rotation about an axis. The two targets are continuously selectable during the simulated rotation (e.g., FIGS. 9A, 9B, 10A, 10B).

Neither Matthews nor Yeh disclose or suggest these limitations. Matthews shows a single object that has multiple panels that may be selected. The single object of Matthews tumbles in animation. Matthews does not disclose or suggest two targets that are continuously selectable during a simulated rotation about an axis. Yeh is directed to the mechanical function of a mouse.

Inventive features of the present invention may be found illustrated in various drawing figures (e.g., FIGS. 4, 9A, 9B, 10A, 10B). An exemplary implementation from (the upper, right hand portion of) FIG. 4 is shown below:

FILE — 315

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315 — VIEW

HELP — 315

PREFERENCES

315
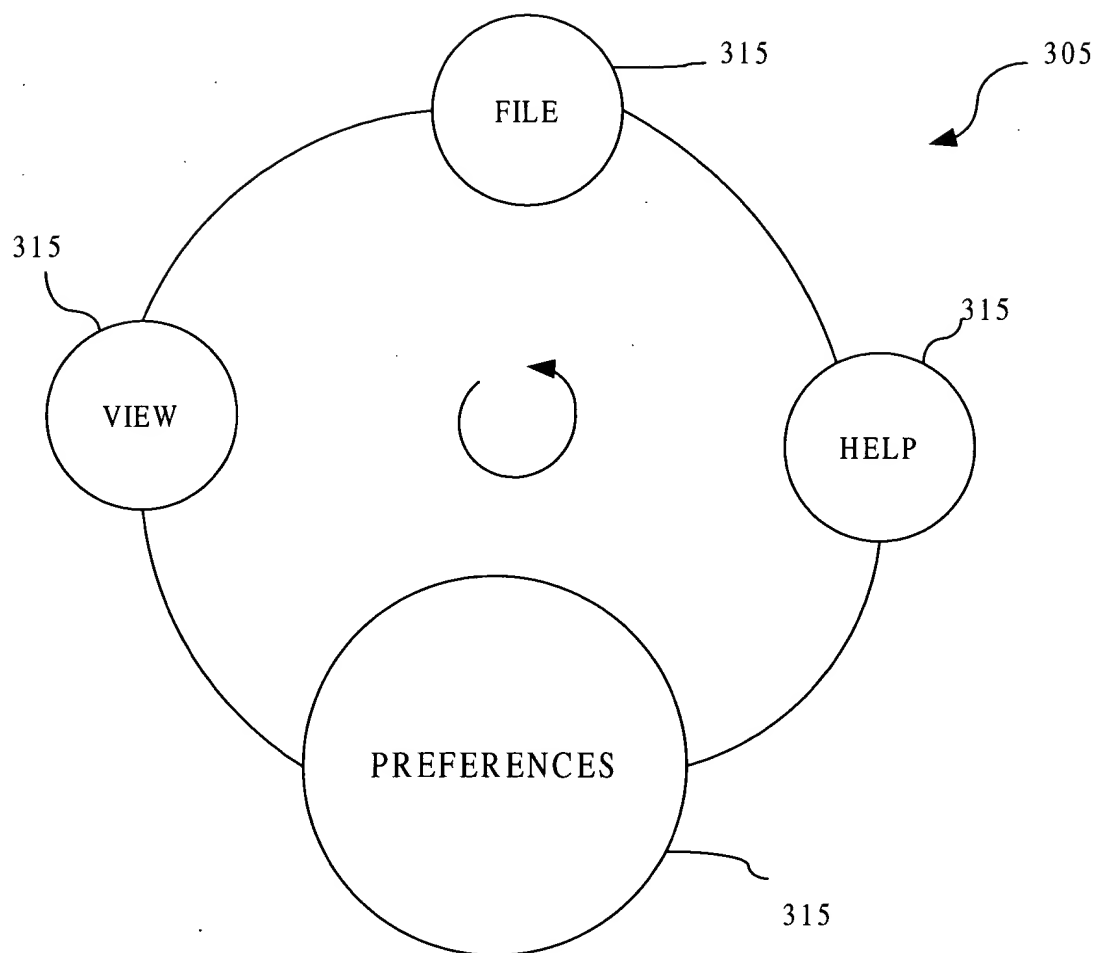
PORTION OF FIG. 4

<u>ISSUE</u>

The issue is whether the Patent Office properly rejected Claims 1-52 under 35 U.S.C. 103(a) as being unpatentable over Matthews, III, et al., U.S. Patent No. 5,724,492, in view of Yeh et al., U.S. Patent No. 6,329,978.

GROUP I

All claims recite "at least two selectable targets displayed on at least a portion of the display" *and* "said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation". The present invention, as claimed, reduces wait time and facilitates use because the options are always selectable.

Matthews does not teach "at least *two* selectable targets" nor "said at least two selectable targets . . . remaining *continuously selectable during said simulated rotation*". Instead, Matthews only teaches one target (e.g., col. 16, lines 28, 31, 37, 44, 45, 47, 59), only shows a single target (e.g., FIG. 4, 5, 7, 10), and teaches a single three dimensional object which tumbles and rotates about an axis (col. 15, lines 15-35).

The animation of Matthews (e.g. FIGS. 6, 11, and 12) depicts the transitions of a single target (e.g., col. 15, lines 15-18; col. 18, lines 19-24; col. 18, lines 37-40), not the two selectable targets claimed. The viewer or user simply watches during the animation. There is no continuous selectability of the single target during the animated sequence.

If, arguendo, the menu panels or choices are considered targets, the prior art still does not teach or suggest the claim limitations of two targets which are continuously selectable during a simulated rotation. Matthews does not teach that the menu panels or choices are continuously selectable because Matthews teaches that they must rotate into view to be selectable (e.g., col. 16, lines 35-36; col. 17, lines 4-8; step 820 of FIG. 8). Figure 8 and column 16, lines 27-45, of Matthews, cited in the Final Office Action, only reinforces Applicant's point that the panels are not continuously selectable, but must be rotated into view to be selected. So, the menu panels and choices are invisible and not selectable for a portion of the time.

Thus, Matthews does not teach or suggest "at least two selectable targets displayed on at least a portion of the display" and "said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation".

Yeh was cited by the Patent Office to provide a teaching for limitations allegedly absent in the primary reference Matthews. The Patent Office asserted "The difference between the claim and Matthews, III et al. is a display, a cursor capable of being

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displayed on said display; a cursor control device capable of controlling said cursor's position and movement on said display" (page 1 of Office Action). However, Matthews discloses the allegedly absent features because Matthews discloses a cursor control device and a cursor (col. 12, lines 20-22).

Furthermore, Yeh is not close. Yeh does not remedy the deficiencies of Matthews because no rotation is disclosed in or suggested by Yeh and no multiple targets are disclosed in or suggested by Yeh. Instead, Yeh is directed to the mechanical function of a cursor control device that uses "rotary circles of the optic grid pieces of the mouse" (col. 2, lines 45-46; col. 1, lines 39-40; col. 1, lines 52-53) and is concerned with measuring distance to extend mouse life (col. 3, lines 1-16).

The combination of Matthews and Yeh is inappropriate because the secondary reference Yeh is cited only to supply a teaching already contained within the primary reference Matthews.

Furthermore, neither Matthews nor Yeh teach or suggest "at least two selectable targets displayed on at least a portion of the display" and "said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation".

Thus, it is respectfully submitted that claims 1-52 are allowable over the prior art of record.

GROUP II

Claims 4, 17, 30, and 43 are allowable over the prior art of record for their own merits as well as for the reasons provided above. Claims 4, 17, 30, and 43 recite "said interface is capable of displaying additional information, on at least a portion of said display, associated with a specific target when said cursor is positioned at least partially within said specific target's hotspot boundary". (A description of which may be found on page 20, lines 1-21, of the specification.) These features aid the user in an image intense environment. Thus, the claims of Group II are separately patentable from Group I and do not stand or fall together with Group I.

Matthews (col. 13, lines 3-23; col. 14, lines 17-25) does not teach the display of "additional information" when the "cursor is positioned at least partially within said

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specific target's hotspot boundary". Instead, Matthews displays text (e.g., figs. 7 and 10) regardless of whether the cursor is within any boundary area and (col. 14, lines 17-25) displays a what's on dialog when an action key is pressed on a remote control unit. Yeh does not teach or suggest this limitation and has not been cited by the Patent Office as doing so.

<center>GROUP III</center>

Claims 5, 18, 31, and 44 are allowable over the prior art of record for their own merits as well as for the reasons provided above. Claims 5, 18, 31, and 44 recite "said interface is capable of modifying said targets being displayed on said display in response to a change in focus on content being displayed in another portion of said display". (A description of which may be found on page 15, lines 12-19, page 17, lines 12-24, and page 19, lines 21-22, of the specification.) These features aid the user in an image intense environment. Thus, the claims of Group III are separately patentable from Groups I and II and do not stand or fall together with Group I or with Group II.

Matthews discloses pull down menus (col. 1, lines 35-67) and discloses animated dynamic transitions of an object (col. 15, lines 59-67; col. 16, lines 19-24). However, there is no teaching or suggestion in Matthews for the limitation "said interface is capable of modifying said targets being displayed on said display *in response to a change in focus on content* being displayed in another portion of said display". Yeh does not teach or suggest this limitation and has not been cited by the Patent Office as doing so.

<center>GROUP IV</center>

Claims 8, 9, 21, 22, 34, 35, 47, and 48 are allowable over the prior art of record for their own merits as well as for the reasons provided above. Claims 8, 21, 34, and 47 recite "said cursor is capable of modifying its presentation into a shape similar to the shape of a specific target which is being given focus by said cursor". Claims 9, 22, 35, and 48 further recite that the cursor takes on "a shape similar to a miniature version of the shape of said specific target". (A description of which may be found on page 27, line 21, through page 28, line 4 of the specification.) By changing the shape of the cursor to highlight a selectable option, system resources are more efficiently utilized and algorithm

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coding for highlighting effects is greatly simplified. Thus, the claims of Group IV are separately patentable from Groups I, II, and III and do not stand or fall together with Group I, Group II, or Group III.

Matthews discloses icons and pull down menus (col. 1, lines 20-67), a set-top terminal that requests the downloading of program modules (col. 11, line 50, through col. 12, line 10), and keys on a remote control unit (col. 12, lines 19-24), but does not disclose or suggest a cursor which is "capable of modifying its presentation into a shape similar to the shape of a specific target which is being given focus by said cursor" or a miniature version. Yeh does not teach or suggest this limitation and has not been cited by the Patent Office as doing so.

In summary, there is no suggestion or motivation in the prior art of record to modify Matthews or to combine Matthews with Yeh. Neither Matthews nor Yeh teach or suggest all the claim limitations of the independent claims. Additionally, Matthews and Yeh do not teach or suggest limitations found in certain dependent claims as discussed above. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. Thus, according to MPEP § 2142, a *prima facie* case of obviousness has not been established.

CONCLUSION

For the above reasons, it is respectfully requested that in each of the rejections discussed herein under 35 U.S.C. § 103, the Patent Office has failed to meet the burden in establishing a *prima facie* basis for the rejections of Claims 1, 3, 4, 6-11, 13, 14, and 16-36. Accordingly, reversal of all outstanding rejections is earnestly solicited.

Respectfully submitted,

GATEWAY, INC.,

Dated: October 28, 2002

By: _Walter J. Malinowski_
Walter J. Malinowski
Reg. No. 43,423

Walter J. Malinowski
SUITER & ASSOCIATES PC
14301 FNB Parkway, Suite 220
Omaha, NE 68154
(402) 496-0300   telephone
(402) 496-0333   facsimile

(9)   CLAIMS

1.   A user interface, comprising:

a display;

a cursor capable of being displayed on said display;

a cursor control device capable of controlling said cursor's position and movement on said display;

at least two selectable targets displayed on at least a portion of said display; and

said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation.

2.   The user interface, as defined in claim 1, wherein said interface is capable of varying the displayed size of said targets during said simulated rotation about said axis.

3.   The user interface, as defined in claim 1, wherein each of said targets are associated with a corresponding function capable of being performed in response to selection of said targets by a user via said cursor and said cursor control device.

4.   The user interface, as defined in claim 3, wherein said interface is capable of displaying additional information, on at least a portion of said display, associated with a specific target when said cursor is positioned at least partially within said specific target's hotspot boundary.

5.   The user interface, as defined in claim 3, wherein said interface is capable of modifying said targets being displayed on said display in response to a change in focus on content being displayed in another portion of said display.

6.   The user interface, as defined in claim 1, wherein said interface is capable of displaying said simulated rotation of said targets about said axis in a simulated three-dimensional presentation.

7.   The user interface, as defined in claim 6, wherein said interface is capable of providing focus to a specific target in response to said cursor being positioned at least partially within said specific target's hotspot boundary.

8.   The user interface, as defined in claim 1, wherein said cursor is capable of modifying its presentation into a shape similar to the shape of a specific target which is being given focus by said cursor.

9.   The user interface, as defined in claim 8, wherein the modification in the presentation of said cursor further comprises changing the shape of said cursor into a shape similar to a miniature version of the shape of said specific target.

10.   The user interface, as defined in claim 1, wherein said targets are displayed as an animated sequence of movement.

11.   The user interface, as defined in claim 1, wherein each of said at least two selectable targets is presented as a polygonal shaped target.

12.   The user interface, as defined in claim 11, wherein said polygonal shaped target is capable of displaying content on each of its user-visible sides.

13.   The user interface, as defined in claim 1, wherein said targets are capable of remaining visible as said targets travel in a simulated rotation about said axis.

14.   A system, comprising:
        at least one processor;
        memory operably associated with said processor; and

a user interface, said user interface comprising

a display;

a cursor capable of being displayed on said display;

a cursor control device capable of controlling said cursor's position and movement on said display;

at least two selectable targets displayed on at least a portion of said display; and

said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation.

15.   The system, as defined in claim 14, wherein said interface is capable of varying the displayed size of said targets during said simulated rotation about said axis.

16.   The system, as defined in claim 14, wherein each of said targets are associated with a corresponding function capable of being performed in response to selection of said targets by a user via said cursor and said cursor control device.

17.   The system, as defined in claim 16, wherein said interface is capable of displaying additional information, on at least a portion of said display, associated with a specific target when said cursor is positioned at least partially within said specific target's hotspot boundary.

18.   The system, as defined in claim 16, wherein said interface is capable of modifying said targets being displayed on said display in response to a change in focus on content being displayed in another portion of said display.

19.   The system, as defined in claim 14, wherein said interface is capable of displaying said simulated rotation of said targets about said targets about said axis in a simulated three-dimensional presentation.

20. The system, as defined in claim 19, wherein said interface is capable of providing focus to a specific target in response to said cursor being positioned at least partially within said specific target's hotspot boundary.

21. The system, as defined in claim 14, wherein said cursor is capable of modifying its presentation into a shape similar to the shape of a specific target which is being given focus by said cursor.

22. The system, as defined in claim 21, wherein the modification in the presentation of said cursor further comprises changing the shape of said cursor into a shape similar to a miniature version of the shape of said specific target.

23. The system, as defined in claim 14, wherein said targets are displayed as an animated sequence of movement.

24. The system, as defined in claim 14, wherein each of said at least two selectable targets is presented as polygonal shaped target.

25. The system, as defined in claim 24, wherein said polygonal shaped target is capable of displaying content on each of its user-visible sides.

26. The system, as defined in claim 14, wherein said targets are capable of remaining visible as said targets travel in a simulated rotation about said axis.

27. A computer readable medium tangibly embodying a program of instructions capable of implementing the following steps:

displaying at least two selectable targets on at least a portion of a display, said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation.

28. The computer readable medium, as defined in claim 27, being capable of further implementing the step of varying the displayed size of said targets during said simulated rotation about said axis.

29. The computer readable medium, as defined in claim 27, being capable of further implementing the step of associating each of said targets with a corresponding function capable of being performed in response to selection of said targets by a user via a cursor and a cursor control device.

30. The computer readable medium, as defined in claim 29, being capable of further implementing the step of displaying additional information, on at least a portion of the display, associated with a specific target when said cursor is positioned at least partially within said specific target's hotspot boundary.

31. The computer readable medium, as defined in claim 29, being capable of further implementing the step of modifying said targets being displayed on said display in response to a change in focus on content being displayed in another portion of said display.

32. The computer readable medium, as defined in claim 27, being capable of further implementing the step of displaying said simulated rotation of said targets about said axis in a simulated three-dimensional presentation.

33. The computer readable medium, as defined in claim 32, being capable of further implementing the step of providing focus to a specific target in response to said cursor being positioned at least partially within said specific target's hotspot boundary.

34. The computer readable medium, as defined in claim 33, being capable of further implementing the step of modifying said cursor's presentation into a shape similar to the shape of a specific target which is being given focus by said cursor.

35.   The computer readable medium, as defined in claim 34, being capable of further implementing the step of modification such that said cursor's presentation further comprises changing the shape of said cursor into a shape similar to a miniature version of the shape of said specific target.

36.   The computer readable medium, as defined in claim 27, being capable of further implementing the step of displaying said targets as an animated sequence of movement.

37.   The computer readable medium, as defined in claim 27, wherein each of said at least two selectable targets is presented as a polygonal shaped target.

38.   The computer readable medium, as defined in claim 37, wherein said polygonal shaped target is capable of displaying content on each of its user-visible sites.

39. :. The computer readable medium, as defined in claim 27, being capable of further implementing the step of keeping said targets visible as said targets travel in a simulated rotation about said axis.

40.   A method comprising the following steps:
        displaying at least two selectable targets on at least a portion of a display, said at least two selectable targets capable of being displayed in a simulated rotation about an axis while remaining continuously selectable during said simulated rotation.

41.   The method, as defined in claim 40, further implementing the step of varying the displayed size of said targets during said simulated rotation about said axis.

42.   The method, as defined in claim 40, further implementing the step of associating each of said targets with a corresponding function capable of being performed in response to selection of said targets by a user via a cursor and a cursor control device.

43.   The method, as defined in claim 42, further implementing the step of displaying additional information, on at least a portion of the display, associated with a specific target when said cursor is positioned at least partially within said specific target's hotspot boundary.

44.   The method, as defined in claim 42, further implementing the step of modifying said targets being displayed on said display in response to a change in focus on content being displayed in another portion of said display.

45.   The method, as defined in claim 40, further implementing the step of displaying said simulated rotation of said targets about said axis in a simulated three-dimensional presentation.

46.   The method, as defined in claim 45, further implementing the step of providing focus to a specific target in response to said cursor being positioned at least partially within said specific target's hotspot boundary.

47.   The method, as defined in claim 46, further implementing the step of modifying said cursor's presentation into a shape similar to the shape of a specific target which is being given focus by said cursor.

48.   The method, as defined in claim 47, further implementing the step of modification such that said cursor's presentation further comprises changing the shape of said cursor into a shape similar to a miniature version of the shape of said specific target.

49.   The method, as defined in claim 40, further implementing the step of displaying said targets as an animated sequence of movement.

50.   The method, as defined in claim 40, wherein each of said at least two selectable targets is presented as a polygonal shaped target.

51. The method, as defined in claim 50, wherein said polygonal shaped target is capable of displaying content on each of its user-visible sides.

52. The method, as defined in claim 40, further implementing the step of keeping said targets visible as said targets travel in a simulated rotation about said axis.